

S7.1.6(b) of Standard No. 301. That sentence reads:

If the weight on any axle, when the vehicle is loaded to unloaded vehicle weight plus dummy weight, exceeds the axle's proportional share of the test weight, the remaining weight shall be placed so that the weight on that axle remains the same.

The Alliance, Ford, and VW opposed the elimination of that sentence. The Alliance stated:

The 136 kg load specified for impact testing by FMVSS [Federal Motor Vehicle Safety Standard] 301 is relatively small for many trucks. Even with this load directly over the rear axle, the test axle loads will generally not be in the same proportions as the specified GAWRs [gross axle weight ratings] for a full-sized truck. The second sentence allows the manufacturer to conduct the test when the conditions specified in the first sentence cannot be met.

VW recommended that the agency incorporate the load distribution provisions of S7.1.6(b), which apply to multipurpose passenger vehicles, trucks, and buses, in S7.1.6(a), which applies to passenger cars. VW also suggested that the text of S7.1.6(a) and (b) be clarified to state that the weight placement and attachment must be out of the vehicle crush zone and done in a manner that does not interfere with vehicle crash deformation.

GM recommended that the agency revise the test vehicle loading conditions to read as follows:

Passenger cars. A passenger car is loaded to its unloaded vehicle weight plus the weight of the necessary anthropomorphic test devices, plus its rated cargo and luggage capacity weight, secured in the luggage area.

Multipurpose passenger vehicles, trucks, and buses. A multipurpose passenger vehicle, truck, or bus is loaded to its unloaded vehicle weight plus the weight of the necessary anthropomorphic test devices, plus 136 kilograms or its rated cargo and luggage capacity weight, whichever is less, secured in the load carrying area and distributed as nearly as possible in proportion to its gross axle weight ratings. For the purposes of this standard, unloaded vehicle weight does not include the weight of work-performing accessories.

GM also recommended that the agency replace the language in S8.1.1 of Standard No. 208, S6.1 of Standard No. 212, S7.7 of Standard No. 219, S7.1.6 of Standard No. 301, S7.1.6 of Standard No. 303, and S7.2.3 of Standard No. 305 with the same language as that quoted above.²⁰ GM stated that these changes would facilitate common understanding, eliminate any ambiguity

that might be due to any differences in the language of these standards, parallel the wording of the test procedure, and agree with the agency's intent for the loading conditions to be consistent.

6. Lowering the Barrier Face

In the NPRM, the agency proposed that the MDB that would be used in the proposed rear impact test procedure upgrade be the same as the one shown in Figure 2 of Standard No. 214, except that the barrier face would be 50 mm (2 inches) lower. The agency requested comments on this proposed change.

DC, GM, and Ford supported the proposed lowering of the barrier face for rear impact testing. The Alliance and VW, however, questioned NHTSA's proposal to lower the barrier face for the rear impact testing. VW commented that the statistics used by NHTSA to justify the proposed change had not been verified. VW also stated,

The speed distribution of rear end crashes in which pre-impact braking might occur has not been fully addressed and it is possible that pre-impact braking of either the target vehicle or the impacting vehicle or both is not as common as NHTSA assumes in the high speed rear impact crashes that the very severe upgraded rear crash test is intended to address.

7. Pole Side Impact Test

In the NPRM, the agency noted that the side collision fire rate for passenger cars, light trucks, and vans is highest when a narrow object is struck. Thus, the agency asked whether it would be reasonable to consider a pole side impact test as part of a subsequent upgrading of Standard No. 301.

The Alliance, DC, GM, Ford, and Porsche opposed a pole side impact test. The Alliance stated that NHTSA would need to provide a full assessment of the safety basis if the agency undertook such a rulemaking. The Alliance also stated that the agency would need to propose a detailed test procedure, including pole contact locations, closing velocities, pole sizes, and modes of testing.

DC commented that any potential benefits of a pole side impact test "would be far outweighed by the added counter measures that such testing would require." DC stated:

We believe that the benefits to real world safety and the scope and magnitude, and impact on motor vehicle design of such requirements would need to be verified through detailed studies, testing, and be evaluated by the agency prior to consideration of such potentially invasive regulation with apparent major impact on motor vehicles. We believe that such studies would not demonstrate an appreciable benefit in overall real world occupant safety.

Advocates supported adding a pole side impact test to Standard No. 301. Advocates stated,

Such a test would provide concurrent safety information on both upper and lower interior occupant protection (because of severe side structure deformation and localized intrusion), door integrity both during and after the crash, and of fuel system integrity.

8. Prohibiting Fuel Leakage in Frontal Impact Crash Tests

In the NPRM, the agency asked whether it should amend Standard No. 301 to prohibit fuel leakage in any crash test performed under Standard No. 208.

The Alliance and GM supported a future revision limiting fuel system leakage in any Standard No. 208 crash test to current Standard No. 301 requirements, if a meaningful safety benefit could be determined.

DC and Ford opposed a fuel leakage requirement in Standard No. 208 crash tests.

Advocates commented that the rates of fuel release and quantities currently permitted by Standard No. 301 are not consonant with fire prevention and occupant safety following a crash. Advocates recommended that the agency should show the real-world consequences of the rates and amounts of fuel spillage permitted by Standard No. 301, and, if the amounts are judged to be too lenient, revise them to minimize the chances of a post-crash fire.

IIHS and Dynamic Safety recommended that the agency adopt frontal offset crash test requirements in Standard No. 301. IIHS stated, "Frontal offset deformable barrier crash tests create deformation patterns commonly found in severe real-world crashes. The offset loading challenges the vehicle's ability to retain its structural integrity."

9. Compliance Responsibility of Second-Stage Manufacturers

In the NPRM, the agency noted that there are a large number of second-stage manufacturers that could be affected by the proposed rule. Second-stage manufacturers buy a chassis from a first-stage manufacturer and finish it to the consumer's specifications. The manufacturers that put a work-related body on a pickup truck chassis (such as a small tow truck) often perform manufacturing operations affecting the fuel system, both in the structure around the fuel tank and where the fuel filler neck attaches to the body. Other second-stage manufacturers use a van chassis or an incomplete vehicle for ambulances, small mobile homes, small school buses, etc.

²⁰ GM recommended that the following sentence be included in the language for Standard Nos. 208, 212, and 219: "Vehicles are tested to a maximum unloaded vehicle weight of 2,495 kilograms."